

sites (two owls in one trap) during a time span of four hours (1715–2115). At a Mission College construction site in Santa Clara, California, two owls were caught at one trap during a one hour and twenty-three minute time span (2042–2205) on 7 August. The following day, two owls were captured at two trap sites during a two hour and fifteen minute time span (2300–0115). The ease of constructing and setting the trap, the potentially high capture rate, and the lack of trapping injuries allow the one-way door trap to be used as an alternative to Bal-chatri, noose carpets, and padded leg-hold traps.

DIRECTIONS AND PRIORITIES FOR RAPTOR RESEARCH IN THE WESTERN UNITED STATES

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We initiated an assessment of the priorities of potential research directions to furnish a framework that would help guide future research on western raptors. We solicited input by means of a survey of opinions sent to a representative sample of established raptor specialists throughout North America. A total of 27 responses was received and summarized. Most respondents to our survey favored emphasizing priority research on the species of most critical conservation need rather than on essential general research questions. Specifically, participants advocated that research efforts be focused on declining species and species of unknown status. On the basis of recommendations received and review of the literature, we classified all western raptors into one of three priority categories. Species that were ranked in the highest priority category include the California Condor, Northern Goshawk, Ferruginous Hawk, Golden Eagle, Northern Pygmy-Owl, Mexican Spotted Owl, Boreal Owl, and Ferruginous Pygmy Owl. Based on the survey results and our own familiarity with the state of raptor research, we classified 15 general research topics into one of three priority categories. The respondents to our survey overwhelmingly identified three topics that should receive greatest research emphasis: 1) develop accurate monitoring techniques, 2) monitor population numbers, and 3) determine habitat affinities and needs. Finally, we ranked the priority of several specific topics related to developing reliable monitoring techniques. Of foremost importance is research designed to determine the validity and sensitivity of various existing and proposed monitoring approaches. We suggest that current and future studies that involve both species and research topics in the highest priority categories will likely represent significant contributions to the understanding and conservation of western raptors.

BEHAVIORAL INTERACTIONS WITHIN A BREEDING PAIR AND OFFSPRING OF MISSISSIPPI KITES (*ICTINIA MISSISSIPPIENSIS*)

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A single Mississippi Kite (*Ictinia mississippiensis*) nest with two nestlings was studied from hatching to fledging. Six nestling behaviors are examined in relation to days or weeks from hatching. Parental care was carried out by both parents throughout the nestling period. The male provided more food to both nestlings than did the female. Nestlings consumed similar amounts of food over the duration of the nestling period. Allopreening, setting the nest, and working the nest were observed among the nestlings. Intra-nestling aggression occurred with the younger chick exhibiting almost as many aggressive pecks against the older chick as vice versa. These data suggest that the Mississippi Kite's, and perhaps other kites', pattern of parental care and nestling behaviors may be quite different from that of other raptors.

FIRE SUPPRESSION AND MANAGEMENT OF SPOTTED OWL HABITAT IN THE WENATCHEE NATIONAL FOREST

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Historically, fire was the most significant disturbance factor in the mixed-conifer forests of the east slope of the Cascade Mountains in Washington. Prior to fire suppression, low-intensity ground fires generally occurred at intervals of less than 50 years across much of the landscape in this region. These short fire intervals prevented the establishment of fire avoiders such as grand fir (*Abies grandis*). During the recent period of fire suppression, a much longer fire interval has influenced stand structure and species composition, resulting in forest stand conditions suitable for occupancy by Spotted Owls (*Strix occidentalis*). Concomitantly, suppression of frequent, low intensity fires has enhanced conditions for stand-replacement fire by increasing fuel accumulations and continuity. In the Wenatchee National Forest (WNF), Spotted Owls appear to nest exclusively in forests naturally regenerated following fires of varying intensity and magnitude. About half of the known Spotted Owl nests occur in even-aged stands 65–135 years old. Most of these stands are dominated by Douglas-fir (*Pseudotsuga menziesii*), although grand fir is present at nearly all sites and typically ranks second in terms of tree abundance and basal area. In addition, 23% of the nest sites had been partially harvested, apparently several decades prior to our study. Priority fire protection has been recommended for sensitive forest habits